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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,056	09/15/2000	Andrew C. Gallagher	80525SHS	2954

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EXAMINER

ROSARIO-VASQUEZ, DENNIS

ART UNIT PAPER NUMBER

2621

DATE MAILED: 01/15/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,056

Applicant(s)

GALLAGHER, ANDREW C.

Examiner

Dennis Rosario-Vasquez

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 22, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 5, 11, 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 6-9, 12-15, 19, 21-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on October 22, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on October 22, 2003, and has been entered and made of record. Currently, claims 1-24 are pending. Due to an updated search this is a 2nd non-final office action. Disregard the first office action. Examiner regrets any inconvenience.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 4 and 10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10 and 34 of U.S. Patent No. 6,591,005 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because with regard to U.S. Patent No. 6,591,005 B1 discloses all of the limitations of claims 4 and 10 except detecting an amount of rotation; however, U.S. Patent No. 6,591,005 B1, claim 10, which is representative of claim 34, states, "The method claimed in claim 1, further comprising the step of

detecting the orientation of the image based on the selected vanishing point location (U.S. Patent No. 6,591,005 B1 detects orientation and not rotation; however, orientation would encompass various functions such as rotation, translation, and skew.).”.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1-3 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sumino et al (U.S. Patent 5,325,470).

With regard to claims 1-3, Sumino et al. discloses a method of a system (fig. 2) generating an image transform for modifying a digital image (Sumino et al. states, “...the operator can easily synthesize a real image and a CG having a complex shape simply by performing the operation of translational, rotational or scaling transformation (col. 5, lines 28-31).”), comprising:

a) detecting a vanishing point (fig. 4B, num. 351) related to the selected image (fig. 4B, num. 300) (Sumino et al. uses vanishing points to determine a plane’s normal vector (col. 3, lines 12-16).);

b) determining a preferable vanishing point (fig. 4B, num. 351) location (Using figure 4B, Sumino et al. states," ...the intersection between straight lines L0340 and L2342 is given as qb1351...the intersection qb1351 may be determined also by the straight lines L0340 and L4344 to improve the coordinate accuracy of the intersection qb1351 (col. 6, lines 60-62,67,68 and col. 7, lines 1,2) [Therefore, the coordinates of detected vanishing point (fig. 4B, num. 351) of step b) is improved by using more straight lines to determine a new vanishing point or preferable vanishing point which results in an improved coordinate accuracy]."); and

c) generating an image transform (fig. 3, num 211) based on the vanishing point location and the preferable vanishing point location (Sumino et al. states," a three-dimensional rotational transformation of the CG having a complex shape are calculated from each normal vector [,and each normal vector was derived from the points qb1351 and qb2352](col.5, lines 59-61 and col. 7, lines 2-12)."

Claim 2 was addressed in claim 1c) above.

Claim 3 was addressed in claim 1b) above.

With regard to claims 16-18, Sumino et al. discloses a computer readable medium having computer executable instructions at column 4, lines 45-47: "a magnetic disk 110 (fig. 2) for storing a processing program".

Drawings

6. The drawings were received on October 22, 2003. These drawings are acceptable.

Specification

7. The amendments to the specification received on October 22, 2003 have been reviewed and accepted.

Allowable Subject Matter

8. Claim 6-9,12-15,19,21-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Seago (U.S. Patent 5,990,900 A) is pertinent as teaching a method of determining a image's orientation in relation to a axis coordinate system using vanishing points (fig. 2, num. 48). This reference is applicable to claim 1.

Isaacs (U.S. Patent 5,798,761) is pertinent as teaching a method of categorizing vanishing points (129,169 and 172) based on regions (fig. 6A, numerals 171,165,163) of the image.

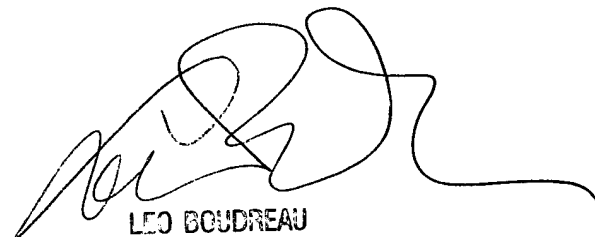
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Rosario-Vasquez whose telephone number is 703-305-5431. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9313.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

DRV
Dennis Rosario-Vasquez
Unit 2621



LEO BOUDREAU
SUPERVISORY PATENT EXAMINER
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